



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,539	10/22/2001	George C. Zguris	156.0170	3997
3404	7590	07/01/2004	EXAMINER MARTIN, ANGELA J	
PURDUE LAW OFFICES 2735 N. HOLLAND-SYLVANIA ROAD SUITE B-2 TOLDEO, OH 43615			ART UNIT 1745	PAPER NUMBER

DATE MAILED: 07/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/004,539

Applicant(s)

ZGURIS, GEORGE C.

Examiner

Angela J. Martin

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 52-63,75,77-83 and 120 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 52-63,75,77-83 and 120 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/18/02; 9/8/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 52 and 75 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nelson et al., U.S. Pat. No. 4,606,982.

Rejection of claims 52 and 75 drawn to a storage battery.

Nelson et al., teach a storage battery comprising a plurality of lead plates in a closed case (abstract), a fibrous sheet plate separator between adjacent plates, and sulfuric acid electrolyte, the improvement wherein the separator sheets consist essentially of intermeshed glass fibers, the mass of fibers has a BET surface area of from about 1.5 to about 3.0 m²/g of glass (col. 4, lines 23-40).

Thus, the claim is anticipated.

However, in the alternative, the claim is obvious when the reference teaches a product that appears to be the same as, or an obvious variant of, the product set forth in a product-by-process claim although produced by a different process. See *In re Marosi*, 710 F.2d 799, 218 USPQ 289 (Fed. Cir. 1983) and *In re Thorpe*, 777 F.2d 695, 227 USPQ 964 (Fed. Cir. 1985).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 52-63, 77-83 and 120 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson et al., U.S. Pat. No. 4,606,982, in view of O'Rell et al., U.S. Pat. No. 4,265,985.

Rejection of claims 52-63, 77-83 and 120 drawn to a storage battery.

Nelson et al., teach a storage battery as described above.

Nelson et al., do not teach the claim limitations of the storage battery as described in claims 53-63, 77-83, and 120.

O'Rell et al., teach a storage battery with two different kinds of organic fibers (col. 2, lines 37-56). It also teaches the organic fibers are polyolefin (col. 2, lines 58-62); the polyolefin fibers are hydrophilic (col. 5, lines 34-45); the organic fibers are polyester (col. 3, lines 50-53); the outer surfaces of polyester fibers are rough (fibrillated) (col. 3, lines 34-40); the organic fibers are acrylic (col. 3, lines 50-53) which are fibrillated (col. 3, lines 34-40). Additionally, it teaches the separator is composed of organic fibers and a particulate inorganic material (col. 3, lines 14-17); the particulate material is from 15-65 % (col. 3, lines 14-17); at least some of the organic fibers are bi-component fibers (col.

Art Unit: 1745

4, lines 22-44). It also teaches the separator contains a particulate inorganic material suspended in the gaseous medium with glass fibers (col. 3, lines 14-54).

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to insert the teachings of O'Rell et al., into the teachings of Nelson et al., because O'Rell et al., teach a variety of different kinds of fibers employed in the battery separator of a lead acid storage battery, depending on the application of the battery.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Clough, U.S. Pat. No. 5,895,732, teaches a battery separator for a lead acid battery.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela J. Martin whose telephone number is 571-272-1288. The examiner can normally be reached on Monday-Friday from 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1745

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


AJM